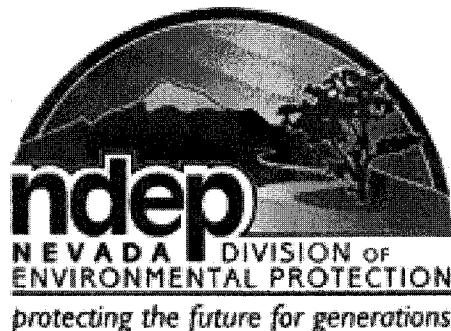


**NEWMONT MINING CORPORATION  
GOLD QUARRY OPERATION AREA  
P.O. BOX 669  
CARLIN, NEVADA 89822**

**Class I (Title V) Air Quality Operating Permit - Minor Revision  
Air Case 12AP0239**

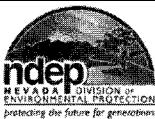
**Class I Air Quality Operating Permit  
No. AP1041-0793**



BY

STATE OF NEVADA  
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES  
DIVISION OF ENVIRONMENTAL PROTECTION  
BUREAU OF AIR POLLUTION CONTROL

GAY MCCLEARY  
FEBRUARY 15, 2012  
REVISED FEBRUARY 29, 2012



## 1.0 INTRODUCTION

Newmont Mining Corporation – Gold Quarry Operations Area (Newmont) submitted a Class I minor modification application on December 20, 2011, for a minor revision to existing Class I Air Quality Operating Permit No. AP1041-0793. The Nevada Division of Environmental Protection, Bureau of Air Pollution Control (BAPC) declared Newmont's minor revision application administratively complete on January 5, 2012. Pursuant to NAC 445B.3425(3)(b), a copy of the minor revision application was sent to the Environmental Protection Agency on January 17, 2012.

Newmont is accessed from I-80 at Exit 280 (State Route 766), 6 miles northwest of Carlin, Nevada. Newmont is located within Section 13, T33N/T34N, R51E/52E; Sections 19/29/30/32, T35N, R50E/R51E. Newmont is located in Hydrographic Area (HA) 51. HA 51 is currently unclassified for PM<sub>10</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub>, O<sub>3</sub>, and lead criteria pollutants, which have an ambient air quality standard.

The BAPC case log number for this application is 12AP0239. Support facilities located on site but not owned by Newmont include the Praxair oxygen plant. The principal operation is metal mining and the processing of gold ores, and the North American Industry Classification System (NAICS) code is 212221; gold ore mining. The Standard Industrial Classification (SIC) code for the process is 1041: Gold Ores. This code is reserved for establishments primarily engaged in mining gold ores from lode deposits or in the recovery of gold from placer deposits by any method. In addition to ore dressing methods such as crushing, grinding, gravity concentration, and froth flotation, this industry includes amalgamation, cyanidation, and the production of bullion at the mine, mill, or dredge site.

In this minor modification, Newmont proposes to construct and operate a new shotcrete plant at the Chukar Undrground Mine; and relocate System 04, Chukar Underground Lime/Cement Soda Ash Silo – Loading.

To determine if this proposed revision warrants a major modification determination under the provisions of 40 CFR 52.21 – Prevention of Significant Deterioration (PSD), Newmont conducted an analysis of baseline actual emissions from the flux mixer and compared them to the potential emissions increase from this revision request for replacement with the riffle splitter.

Pursuant to 40 CFR 52.21(a)(1)(d), an Actual-to-Potential test for projects that only involve construction of a new emissions unit(s) is as follows: A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph 52.21(b)(4)) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph 52.21(b)(48)(iii)) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph 52.21(b)(23)). For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit. Estimated potential annual emissions increases from this proposed modification are as follows: PM = 12.677 tons per year (tpy), PM<sub>10</sub> = 4.218 tpy, PM<sub>2.5</sub> = 4.218 tpy. Therefore, the actual to potential test reveals that this proposed revision emissions increase is less than de minimis threshold levels as outlined in 40 CFR 52.21(b)(23), and this revision is determined to be a minor revision.



## 1.0 INTRODUCTION (continued)

Pursuant to NAC 445B.3395(8)(c), this minor revision is not subject to a 30-day public comment period because the BAPC has determined that this minor revision does not result in a significant change in air quality at any location where the public is present on a regular basis. Further, no case-by-case review is required nor is there a change in a case-by-case determination proposed. However, the 45-day EPA-Region IX review period remains in effect.

### 1.1 PROPOSED MODIFICATIONS

A complete description of the current Newmont operations is detailed in previous technical reviews. Only a description of the changes to the Class I Operating Permit are detailed in this review.

#### 1.1.1 Chukar Underground Mine Shotcrete Plant

Newmont proposes to construct a shotcrete plant with an associated silo. System 04A will be removed from the permit and replaced by new System 89. The shotcrete plant and silo will be located in an existing mine pit and will not disturb any undisturbed ground. The primary use of the shotcrete plant is the manufacture concrete which is used to stabilize the portals, adits, and drifts of an underground mine. The silo is used to store cement, lime and soda ash that is used in the concrete.

#### 1.1.2 Annual Emission Changes

The minor revision results in an increase of 10.494 tons per year PM, an increase of 3.017 tons per year PM<sub>10</sub>, and an increase of 3.017 tons per year PM<sub>2.5</sub> (conservative).



## 2.0 APPLICABLE REQUIREMENTS

Applicable requirements are those regulatory requirements that apply to a stationary source or to emission units contained within the stationary source. In Nevada's program, the regulations governing the emissions of air pollutants from which the applicable requirements originate are derived from four categories of regulations. These four categories consist of the requirements contained in the Nevada Revised Statutes (NRS), the Nevada Administrative Code (NAC), the Applicable State Implementation Plan (ASIP), and the Code of Federal Regulations (CFR, contained in various Parts within Title 40).

### 2.1 GENERALLY APPLICABLE REQUIREMENTS

Of the four categories of regulations governing emissions of air pollutants, there are many generally applicable requirements that apply to stationary sources and emission units located at a stationary source. A comprehensive summary of applicable permit requirements is contained in Sections I through V of the Title V air quality operating permit.

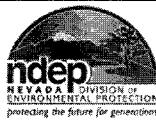
### 2.2 SPECIFIC APPLICABLE REQUIREMENTS

#### 2.2.1 Nevada Revised Statutes

The Nevada Revised Statutes (NRS) is the statutory authority for the adoption and implementation of administrative regulations. The statutes relating to the control of air pollution are contained in NRS 445B.100 through 445B.640. The NRS specifies that the State Environmental Commission is the governing body given the power to adopt administrative regulations. Because the NRS is the enabling statutory authority, very few specific requirements are contained in the statutes. Rather, the NRS provides, generally, broad authority for the adoption and implementation of air pollution control regulations.

#### 2.2.2 Nevada Administrative Code

The Nevada Administrative Code (NAC) is a collection of administrative regulations that contain specific requirements relating to the control of air pollution. The State Environmental Commission adopts these regulations. The NAC requires that, where state regulations are more stringent in comparison to Federal regulations, the State regulations are applicable. The NAC sets forth, by rule, maximum emission standards for visible emissions (opacity), PM<sub>10</sub> and sulfur emitting processes. Other requirements are established for incinerators, storage tanks, odors and maximum concentrations of regulated air pollutants in the ambient air. Other NAC regulations specify the requirements for applying for and method of processing applications for operating permits. All of the equipment considered in this application must meet, at a minimum, the applicable standards and requirements set forth in the NAC. Specifically, the emission standards contained in NAC 445B.2203 for particulate matter, 445B.22017 for opacity, and 445B.22097 for the ambient air quality standards must not be exceeded.



## **2.0 APPLICABLE REQUIREMENTS (continued)**

### **2.2.3 Nevada Applicable State Implementation Plan (ASIP)**

The Applicable State Implementation Plan (ASIP) is a document prepared by a State or local air regulatory agency and required to submit to the U.S. EPA for approval. Title I of the Clean Air Act is the statutory authority for the U.S. EPA regulations that require a State to submit a SIP. The contents of the SIP are intended to show how a State, through the implementation and enforcement of the regulations contained in the SIP, will either show how attainment of the national ambient air quality standards (NAAQS) will be achieved or how a State will continue to maintain compliance with the NAAQS. Nevada's most recent ASIP approved by the U.S. EPA is based on State regulations codified in 1982 with revisions/approvals as recently as April 9, 2008. In general, the regulations contained in the ASIP closely parallel the current NAC regulations. However, because the ASIP is partly based on older air quality regulations (at this time), compliance with all of the current NAC regulatory requirements does not necessarily ensure compliance with the ASIP requirements. All of the equipment considered in this application must meet, at a minimum, the standards set forth in the ASIP. Specifically, the emission standards contained in ASIP NAC 445B.22033 for particulate matter from sources not otherwise limited, 445B.22017 for maximum opacity, and 445B.22097 for the ambient air quality standards must not be exceeded.

### **2.2.4 New Source Performance Standards (NSPS)**

The U.S.EPA has promulgated maximum emission standards and monitoring / recordkeeping methods for selected source categories. These standards are contained in Title 40 of the CFR, Part 60, and are known as the New Source Performance Standards (NSPS). The proposed shotcrete plant is not subject to any NSPS requirements.

### **2.2.5 40 C.F.R. Parts 61 and 63 National Emission Standards for Hazardous Air Pollutants (NESHAP)**

Parts 61 and 63 establish the National Emission Standards for Hazardous Air Pollutants (NESHAPS). There are no sources at the facility for which a standard has been established under these parts.

### **2.2.6 40 C.F.R. Parts 72 to 78 Acid Rain Exemption**

The Newmont facility is exempt from the acid rain provisions under 40 C.F.R. Parts 72 to 78 because there are no units listed in Tables 1, 2, or 3 of §73.10 at the facility, and there are no utility units at the facility that serve a generator that produces electricity for sale.

### **2.2.7 40 CFR Part 52.21. Prevention of Significant Deterioration Regulations (PSD)**

The U.S. EPA delegated implementation of the federal PSD regulations to the State of Nevada; and BAPC implements the federal PSD regulations through a delegation agreement with EPA. These regulations contained at 40 CFR Part 52.21 specify federally required permitting procedures for each "major stationary source". The PSD regulations define a "stationary source" as "any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act." A "building structure facility or installation" is defined as "all of the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or



## 2.0 APPLICABLE REQUIREMENTS (continued)

adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement."

"Major" is defined as the potential to emit of a stationary source, which equals or exceeds a specified threshold (in tons per year) of any air pollutant regulated under the Clean Air Act (40 CFR 52.21(b)(1)). The first threshold is for a stationary source that emits or has the potential to emit 100 tons per year or more and is defined as one of 28 specific categories of sources (see 40 CFR 52.21(b)(1)(i)(a)). The other applicability threshold is for any other stationary source that emits or has the potential to emit 250 tons per year (see 40 CFR 52.21(b)(1)(i)(b)). As mentioned above, the SIC code for this facility is 1041. None of the 28 specific categories is representative of this facility. Major stationary source status therefore is classified at the 250 tons per year emission threshold for any pollutant regulated under the Clean Air Act for the Newmont facility.

### 2.2.8 Prevention of Significant Deterioration Determination

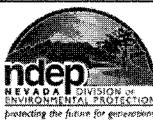
As discussed above, 40 CFR Part 52.21 specifies that Prevention of Significant Deterioration (PSD) review is required for any new major stationary source or any major modification. A major source is defined as any pollutant emitting activities, which belong to the same two digit Source Industry Classification (SIC), and:

1. Emit 100 tons/yr or more of a regulated air contaminant as one of the listed categories of sources listed in 40 CFR 52.21; or
2. Emits 250 tons/yr or more of a regulated air contaminant and belong to any other category sources.

Although this facility is not classified as one of the listed categories of sources, the facility-wide potential to emit of several regulated pollutants exceed 250 tons/yr. The facility is a major stationary source for PSD purposes. Newmont has submitted emission calculations as part of the minor revision application, which indicates that the potential annual emissions from this minor revision will not equal or exceed specified significant thresholds (in tons per year) of any air pollutant regulated under the Clean Air Act (40 CFR 52.21(b)(1)). Specific emissions increases may be observed in Table 1.

The BAPC reviews each proposed modification and evaluates whether each modification should be aggregated. There have been several permit actions to Class I Air Quality Operating Permit No. AP1041-0793 since the renewal application was submitted in mid-2008, as follows:

- (1) March 12, 2009 - Add Chukar Underground Lime/Cement/Soda Ash Silo, Loading (System 4A), add South Area Leach Lime Silo, Loading and Unloading (Systems 11A and 12A), add Alternate Operating Scenario, Refractory Leach Project Transfer of Secondary Crushed Ore System (System 19A), add Alternate Operating Scenario, Mill 6 Transfers to Fine Ore Bin and Roaster Day Bins (System 41A), increase hourly and annual VOC emission limits for carbon kiln #1 and carbon kiln #2 (Systems 72 and 73), and revise operate parameters and emission limits for Integrated Lab Flux Mixer (System 81); PM emissions increase 12.39 tons per year, PM<sub>10</sub> emissions increase 4.46 tons per year, and PM<sub>2.5</sub> emissions increase 4.46 tons per year (conservative); VOC emissions increase 19.22 tons per year.



## 2.0 APPLICABLE REQUIREMENTS (continued)

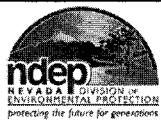
- (2) August 24, 2009 – add new pre room laboratory crusher system (System 88); PM, PM<sub>10</sub> and PM<sub>2.5</sub> emissions each increase 2.86 tons per year.
- (3) November 23, 2009 – permit was reopened and revised to fix typographical errors; no change in emissions.
- (4) October 1, 2009 – administrative amendment to revise address; no change in emissions.
- (5) January 22, 2010 – change of location for four diesel storage tanks (System 83) and Underground Ore Metal Removal System (Systems 85, 86 and 87); no change in emissions.
- (6) January 26, 2011 – Integrated Laboratory – remove flux mixer and replace with riffle splitter; no change in emissions.
- (7) November 7, 2011 – change of location for Chukar Underground Lime Silo Loading (System 04), additional location for Cement/Lime Silo Loading and Discharge (Systems 11 and 12); no change in emissions.

The BAPC agrees that the previous minor modifications over the last several years are distinct and separate from the proposed minor modification and their emissions should not be aggregated towards the PSD significant thresholds.

For the proposed minor modification, the minor modification adds 10.494 tons/year of PM and 3.017 tons/year of PM<sub>10</sub> to the potential emissions for PSD analysis. Newmont conservatively estimated the PM<sub>2.5</sub> will be less than or equal to the PM<sub>10</sub> annual emissions. The total particulate changes in annual emissions are well below the PSD thresholds, Table 1.

**TABLE 1 - ACTUAL TO POTENTIAL PSD ANALYSIS**

POLLUTANT	EMISSIONS RATE INCREASE (tpy)	PSD Significant Threshold (tpy)	Subject to full PSD Review?
PM	10.494	25.0	NO
PM <sub>10</sub>	3.017	15.0	NO
PM <sub>2.5</sub>	3.017	10.0	NO
SO <sub>2</sub>	0.00	40.0	N/A
CO	0.00	100.0	N/A
NOx	0.00	40.0	N/A
VOC's	0.00	40.0	N/A



## 2.0 APPLICABLE REQUIREMENTS (continued)

### 2.2.9 Compliance Assurance Monitoring (CAM)

The U.S. EPA has promulgated requirements for sources to provide detailed monitoring plans that will ensure compliance with all applicable requirements. These monitoring requirements are contained in 40 CFR Part 64. Section 64.2 specifies that these monitoring requirements apply to a "pollutant specific emission unit at a major source" if all of the following are satisfied:

- The unit is subject to an emission limitation or standard;
- The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- The unit has potential pre-control device (uncontrolled) emissions equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

The key factors that would require the submission of a CAM plan are: 1) the facility must be defined as a "major source"; and 2) the units must be subject to an emission limitation or standard (acid rain limitations and standards are not included). The new system's uncontrolled emissions are less than 100 tons per year and are not CAM applicable.

### 2.2.10 New Applicable Requirements

In accordance with NAC 445.B.295.2 (h)(2), Newmont must comply in a timely manner with any new applicable requirement that becomes effective during the term of the operating permit.



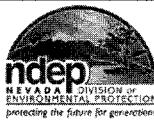
### 3.0 EMISSIONS INVENTORY

**TABLE 2 – NEWMONT FACILITY'S PERMITTED EMISSIONS (TONS PER YEAR)**

	Emissions – Tons per Year					
	PM	PM <sub>10</sub>	NO <sub>X</sub>	SO <sub>2</sub>	CO	VOC
NEWMONT PRE MINOR REVISION TOTALS	472.37	315.68	263.74	222.70	198.55	61.29
NEWMONT POST MINOR REVISION	482.87	318.70	263.74	222.70	198.55	61.29
NEWMONT MINOR REVISION INCREASE	10.494	3.017	--	--	--	--

The emissions increases presented in Table 2 are anticipated increases due to the addition of the proposed shotcrete plant to the Class I Air Quality Operating Permit.

A summary of the potential to emit emission inventory for this minor revision application was completed and is provided in Attachment 1.



## 4.0 AMBIENT AIR QUALITY IMPACT

The purpose of the air quality analysis is to demonstrate that the emissions from the process will not cause or contribute to a violation of any applicable Nevada and National Ambient Air Quality Standards (NAAQS). Nevada Administrative Code (NAC) 445B.310.1(b)(2) requires an air dispersion modeling analysis to be completed by the facility if a modification to an existing air permit is greater than 10 tons of a regulated air pollutant per year. Newmont's proposed minor modification is below the 10 ton limit that would require Newmont to perform the air dispersion analysis.

A revised air dispersion modeling analysis was performed by Newmont's consultant in December 2010, to incorporate minor revisions into the renewal. The modeling parameters for the existing emission sources from the last Newmont Class I Air Permit application revision was updated to account for the particulate emissions from the new system. Only PM<sub>10</sub> was modeled under the proposed minor modification.

### 4.1 CLASSIFICATION OF AIR BASIN

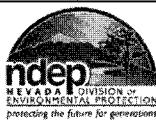
The Newmont facility is located in Air Quality Hydrographic Basin 51, Eureka County, Nevada. Basin 51 is currently classified as attainment for PM<sub>10</sub> and unclassified for all remaining criteria pollutants that have an ambient air quality standard. The unclassifiable designation has been developed due to lack of monitoring data available to properly classify an air basin, such as Basin 51.

### 4.2 METHOD OF AIR QUALITY MODELING ANALYSIS

Newmont's consultant performed the air dispersion modeling using Breeze AERMOD GIS Pro v7 modeling manager for PM<sub>10</sub> emissions. The EPA approved AERMOD model was used to determine the 24-hour and annual PM<sub>10</sub> air quality impacts. AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain.

### 4.3 RESULTS

The AERMOD model results are summarized in Table 3, and printed output is shown in Attachment 2. PM<sub>10</sub> concentrations are from the updated modeling analysis based on the proposed minor modification. The modeled concentrations for all modeled pollutants are below the Nevada ambient air quality standards at the facility fence line. As a result, there will be no exceedances of ambient air quality standards at points accessible to the general public. Electronic copies are located at P:\BAPC\FI\A0002 - NMC Gold Quarry\1041-0793 Gold Quarry\12AP0239\Modeling.



## 4.0 AMBIENT AIR QUALITY IMPACT (continued)

TABLE 3 – NEWMONT GOLD QUARRY MODELING SUMMARY

Criteria Pollutant	Averaging Period	Ambient Standard ( $\mu\text{g}/\text{m}^3$ )	Maximum Impact ( $\mu\text{g}/\text{m}^3$ )	Location UTM meters <i>Northing</i>	Location UTM meters <i>Easting</i>	Impact % Standard
PM <sub>10</sub>	24-hour Annual	150 50	115.2* 16*	4,516,146 4,516,146	569,294 569,294	77.0 32.0

\*PM<sub>10</sub> includes background concentration (10.2  $\mu\text{g}/\text{m}^3$ , 24 hour; 9.0  $\mu\text{g}/\text{m}^3$ , annual)



## 5.0 SIGNIFICANT CHANGE DETERMINATION

Given the information provided by Newmont in the Class I minor modification application, the BAPC determined that this minor modification will not result in a significant change in air quality at any location where the public is present on a regular basis. This determination is based on the fact that the minor modification is not anticipated to result in a significant increase in emissions. Also based on the location of the Newmont operation, the presence of the public on a regular basis is very remote. Because this modification will not result in a significant change in the air quality, pursuant to NAC 445B.3395(8)(c) the provisions of NAC 445B.3395(6) and NAC 445B.3395(7), public notice provisions, do not apply.

## 6.0 CONCLUSIONS / RECOMMENDATIONS

Based on the above review and supporting data and analyses, Newmont's request for a minor revision to the Class I operating permit for the Newmont Gold Quarry operations will not violate any applicable requirements. As a result, it is recommended that Newmont's request for a minor revision to their Class I operating permit be approved.

Attachment 1 Minor Revision Emissions Calculations

Attachment 2 Printed AERMOD Output

Attachment 3 Operating Permit Revised Pages

Gay McCleary  
\_\_\_\_\_  
Gay McCleary

march 2, 2012  
\_\_\_\_\_  
Date

Jeff Kinder  
\_\_\_\_\_  
Jeff Kinder, P.E.  
Supervisor, Permitting Branch

3/01/2012  
\_\_\_\_\_  
Date

## **ATTACHMENT 1**

### **Minor Revision Emission Calculations**



2006 & 2010 Emissions Calculations

10

Proposed Particulate Emissions Inventory for Newmont Mining Corporation, Gold Quarry - Permit No. AP-1041-0793  
PM & PM10 Emissions Calculations

System #	Point #	Source #	Source Description	Process Rate (t/min)		Operating Hours (hr)	Emission Factor (lb/min)	Control Efficiency	Flow Rate (lb/min)	Calculated Emissions (lb/min)		
				PM	PM10					TSP	PM10	TSP
40	-4793	Mill 6	Dynamic Separator Product Baghouse (6300-DC-010)									
	S 2.06	Dynamic Separator Product Baghouse (6300-DC-011)										
	S 2.100	Dynamic Separator Product Baghouse (6300-DC-012)										
	S 2.101	Dynamic Separator Product Baghouse (6300-DC-013)										
41	-4793	System Total										
	S 2.102	All in reverse to Fine One Bin and Bucket Elevator, One Bin.										
	S 2.103	Dynamic Separator Product Baghouse (6300-DC-010) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.104	Dynamic Separator Product Baghouse (6300-DC-011) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.105	Dynamic Separator Product Baghouse (6300-DC-012) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.106	Fine One Bin Baghouse (6300-DC-020) discharge/transfer to Air Slide (6300-AS-006)										
	S 2.107	Static Baghouse (6300-DC-021) discharge/transfer to Air Slide (6300-AS-006)										
	S 2.108	Static Baghouse (6300-DC-022) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.109	Static Baghouse (6300-DC-023) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.110	Static Baghouse (6300-DC-024) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.111	All Slde (6300-AS-007) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.112	All Slde (6300-BH-001) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.113	Fine One Bin (6300-BH-001) discharge/transfer to Bucket Elevator (6300-BE-004)										
	S 2.114	All Slde (6300-AS-007) discharge/transfer to Bucket Elevator (6300-BE-004)										
	S 2.115	All Slde (6300-AS-007) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.116	Bucket Elevator (6300-BE-004) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.117	Bucket Elevator (6300-BE-004) discharge/transfer to North Dry Bin (6300-BH-004)										
	S 2.118	All Slde (6300-AS-007) discharge/transfer to South Dry Bin (6300-BH-004)										
	S 2.119	All Slde (6300-AS-007) discharge/transfer to South Dry Bin (6300-BH-004)										
	System Total											
41A	-4793	System Total										
	S 2.102	(Alternative Operation Scenario) Mill 6 Transfers to Fine One Bin and Roaster Dry Bin										
	S 2.103	Dynamic Separator Product Baghouse (6300-DC-010) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.104	Dynamic Separator Product Baghouse (6300-DC-011) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.105	Dynamic Separator Product Baghouse (6300-DC-012) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.106	Fine One Bin Baghouse (6300-DC-015) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.107	Static Baghouse (6300-DC-020) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.108	Static Baghouse (6300-DC-021) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.109	Static Baghouse (6300-DC-022) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.110	Static Baghouse (6300-DC-023) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.111	All Slde (6300-AS-007) discharge/transfer to Fine One Bin (6300-BH-001)										
	S 2.112	All Slde (6300-BH-001) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.113	Fine One Bin (6300-BH-001) discharge/transfer to Bucket Elevator (6300-BE-004)										
	S 2.114	All Slde (6300-AS-007) discharge/transfer to Bucket Elevator (6300-BE-004)										
	S 2.115	Bucket Elevator (6300-BE-004) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.116	Bucket Elevator (6300-BE-004) discharge/transfer to North Dry Bin (6300-BH-004)										
	S 2.117	Bucket Elevator (6300-BE-004) discharge/transfer to Air Slide (6300-AS-007)										
	S 2.118	All Slde (6300-AS-007) discharge/transfer to South Dry Bin (6300-BH-004)										
	S 2.119	All Slde (6300-AS-007) discharge/transfer to South Dry Bin (6300-BH-004)										
	System Total											
42	-4793	Roaster Umbrella Units										
	S 2.106	North and South CFB Preheater (S2.106-S2.141) and South CFB Preheater (S2.142-S2.146)										
	S 2.121	Static Separator Product Baghouse (6300-DC-005)										
	S 2.122	Static Separator Product Baghouse (6300-DC-007)										
	S 2.123	Static Separator Product Baghouse (6300-DC-009)										
	S 2.124	Static Separator Product Baghouse (6300-DC-010)										
	S 2.125	Primary Gas Heater (6400-BU-004)										
	S 2.126	Primary Gas Heater (6400-BU-005)										
	S 2.127	Primary Gas Heater (6400-BU-006)										
	S 2.128	Primary Gas Heater (6400-BU-007)										
	S 2.129	Primary Gas Heater (6400-BU-008)										
	S 2.130	Primary Gas Heater (6400-BU-009)										
	S 2.131	Primary Gas Heater (6400-BU-010)										
	S 2.132	Primary Gas Heater (6400-BU-011)										
	S 2.133	CFB Preheater (6400-CH-001) discharge/transfer to CFB Roaster (6400-RCH-001)										
	S 2.134	Roaster Safe Device (6400-PH-002) discharge/transfer to Calcine Coker (6400-CC-001)										
	S 2.135	Dust Bin (6400-CC-001) and (6400-CC-003) discharge/transfer to Air Cyclone (6400-CS-011 and 6400-CS-013)										
	S 2.136	Air Cyclone (6400-CS-011 and 6400-CS-013) discharge/transfer to Screw Conveyors										
	S 2.137	Screw Conveyor discharge/transfer to Calcine Coker (6400-CC-001)										
	S 2.138	Screw Conveyor discharge/transfer to Calcine Coker (6400-CC-001)										
	S 2.139	Waste Hopper (6400-WH-001) discharge/transfer to Screw Conveyors										
	S 2.140	Screw Conveyor discharge/transfer to Screw Conveyors										
	S 2.141	Primary Gas Heater (6400-BU-004)										
	S 2.142	Primary Gas Heater (6400-BU-005)										
	S 2.143	Primary Gas Heater (6400-BU-006)										
	S 2.144	Primary Gas Heater (6400-BU-007)										
	S 2.145	Cooling Tower (6400-CH-001) discharge/transfer to CFB Roaster (6400-RCH-004)										
	S 2.146	Cooling Tower (6400-CH-002) discharge/transfer to CFB Roaster (6400-RCH-004)										
	S 2.147	Cooling Tower (6400-CH-003) discharge/transfer to CFB Roaster (6400-RCH-004)										
	S 2.148	Cooling Tower (6400-CH-004) discharge/transfer to Screw Conveyors										
	S 2.149	Air Cyclone (6400-CS-012 and 6400-CS-013) discharge/transfer to Calcine Coker (6400-CC-002)										
	S 2.150	Screw Conveyor discharge/transfer to Calcine Coker (6400-CC-002)										
	S 2.151	Waste Hopper (6400-WH-002) discharge/transfer to Screw Conveyors										
	S 2.152	Primary Gas Heater (6400-BU-004)										
	S 2.153	Primary Gas Heater (6400-BU-005)										
	S 2.154	Primary Gas Heater (6400-BU-006)										
	S 2.155	Thermal Oxidizer Heater (6400-BU-011), Burner #1										
	S 2.156	Thermal Oxidizer Heater (6400-BU-011), Burner #2										
	S 2.157	North and South CFB Roaster Total										
	S 2.158	North and South CFB Preheater Total (S2.107-S2.141) and Recombative Thermal Oxidizer (S2.145-S2.156) (Ex-141)										
43	-4793	System Total										
	S 2.159	Netter (S2.105-S2.127) and South CFB Preheater (S2.143-S2.154) and Recombative Thermal Oxidizer (S2.145-S2.156) (Ex-141)										
	S 2.160	Dry Bin (6400-BH-001) discharge/transfer to CFB Preheater (6400-RCH-002)										
	S 2.161	Phenol (6400-PH-002) discharge/transfer to CFB Preheater (6400-RCH-002)										
	S 2.162	Hopper (6400-BU-002) discharge/transfer to CFB Preheater (6400-RCH-002)										
	S 2.163	Phenol Safe Device (6400-PH-002) discharge/transfer to Calcine Coker (6400-CC-001)										
	S 2.164	Calcine Coker (6400-CC-001 and 6400-CC-003) discharge/transfer to Air Cyclone (6400-CS-011 and 6400-CS-013)										
	S 2.165	Air Cyclone (6400-CS-011 and 6400-CS-013) discharge/transfer to Screw Conveyors										
	S 2.166	Screw Conveyor discharge/transfer to Calcine Coker (6400-CC-001)										
	S 2.167	Waste Hopper (6400-WH-001) discharge/transfer to Screw Conveyors										
	S 2.168	Primary Gas Heater (6400-BU-004)										
	S 2.169	Primary Gas Heater (6400-BU-005)										
	S 2.170	Primary Gas Heater (6400-BU-006)										
	S 2.171	Primary Gas Heater (6400-BU-007)										
	S 2.172	Primary Gas Heater (6400-BU-008)										
	S 2.173	Primary Gas Heater (6400-BU-009)										
	S 2.174	Primary Gas Heater (6400-BU-010)										
	S 2.175	Primary Gas Heater (6400-BU-011)										
	S 2.176	Primary Gas Heater (6400-BU-012)										
	S 2.177	Primary Gas Heater (6400-BU-013)										
	S 2.178	Primary Gas Heater (6400-BU-014)										
	S 2.179	Primary Gas Heater (6400-BU-015)										
	S 2.180	Primary Gas Heater (6400-BU-016)										
	S 2.181	Primary Gas Heater (6400-BU-017)										
	S 2.182	Primary Gas Heater (6400-BU-018)										
	S 2.183	Primary Gas Heater (6400-BU-019)										
	S 2.184	Primary Gas Heater (6400-BU-020)										
	S 2.185	Primary Gas Heater (6400-BU-021)										
	S 2.186	Primary Gas Heater (6400-BU-022)										
	S 2.187	Primary Gas Heater (6400-BU-023)										
	S 2.188	Primary Gas Heater (6400-BU-024)										
	S 2.189	Primary Gas Heater (6400-BU-025)										
	S 2.190	Primary Gas Heater (6400-BU-026)										
	S 2.191	Primary Gas Heater (6400-BU-027)										
	S 2.192	Primary Gas Heater (6400-BU-028)										
	S 2.193	Primary Gas Heater (6400-BU-029)										

Hindi & English

THE JOURNAL OF CLIMATE VOL. 17, NO. 10, OCTOBER 2004

Proposed SO<sub>2</sub>, NO<sub>x</sub>, CO, & VOC Emissions Inventory for Newmont Mining Corporation, Gold Quarry - Permit No. AP1041-0793  
SO<sub>2</sub>, NO<sub>x</sub>, CO, & VOC Emissions Calculations

**SOUTH AREA PM EMISSION FACTOR CALCULATIONS AND REFERENCES**

EMISSION FACTOR REFERENCES		VALUE	NOTES	SYSTEM
A	AP-42, Section 11-24, Metallic Metals Processing, Table 11-24-2, June 2006 PM - Primary Crushing - (lb/ton) PM10 - Primary Crushing - (lb/ton) PM & PM10 - Control Technology - (%) PM & PM10 - Control Technology - (%)	0.5 0.05 99% Enclosure, water & surfactant 99% Pneumatic fogging water sprays 95% Water sprays		01, 05, 06, 33
B	AP-42, Section 13.2.4, Aggregate Handling and Storage Piles, January 1995 $E = \text{emission factor (lb/ton)} = (k)(0.0032)(U/5)^{1.3})(M/2)^{1.4})$ k = particulate size multiplier (1 for TSP and 0.35 for PM10) U = mean wind speed in mph (7.10 for open sources, 1.00 for enclosed, 0.25 for underground transfer) M = moisture content of material in % (4.00 for ore, 6.00 for added moisture, and 7.00 for Bleach mixers)			See Table
C	AP-42, Section 11-12, Concrete Batching, Equation 11-12-1, Table 11-12-3, June 2006 PM - Cement supplement unloading to elevated storage silo (pneumatic) - (lb/ton) PM10 - Cement supplement unloading to elevated storage silo (pneumatic) - (lb/ton) PM - Truck loading - (lb/ton) PM10 - Truck loading - (lb/ton) PM - Weight hopper loading - (lb/ton) PM10 - Weight hopper loading - (lb/ton) PM - Aggregate Transfer - (lb/ton) PM10 - Aggregate Transfer - (lb/ton) PM - Mixer loading (central mix) - (lb/ton) PM10 - Mixer loading (central mix) - (lb/ton) PM - Truck loading - (lb/ton) PM10 - Truck loading - (lb/ton) PM & PM10 - Control Technology - (%) PM & PM10 - Control Technology - (%) PM & PM10 - Control Technology - (%) PM & PM10 - Control Technology - (%)			04, 04-A, 11, 11-A, 12, 12-A, 2B, 37, 55, 56, 57, 62 63, 64, 65, 89, 90, 91, 92, 93
D	AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4-1 & 1.4-2, July 1998			See Table

Based on 2004-2005 Met Data

System #	Source Description	Source #	U	M	PM	PM10	Control Efficiency
02	Conveyor discharge/transfer to Conveyor	PF 1.006	7.10	6.00	0.001084	0.000380	99%
	Conveyor discharge/transfer to Crushed Ore Stockpile	PF 1.007	7.10	6.00	0.001084	0.000380	99%
07	Conveyor discharge/transfer to Conveyor	PF 1.014	7.10	6.00	0.001084	0.000380	85%
08	Conveyor discharge/transfer to Conveyor (Alternative Scenario)	S 2.218	7.10	6.00	0.001084	0.000380	99%
09	Conveyor discharge/transfer to Shuttle Conveyor	PF 1.015	7.10	6.00	0.001084	0.000380	99%
10	Conveyor discharge/transfer to Shuttle Conveyor (Alternative Scenario)	S 2.219	7.10	6.00	0.001084	0.000380	99%
13	Shuttle Conveyor discharge/transfer to Secondary Crushing Stockpile	PF 1.017	7.10	6.00	0.001084	0.000380	75%
	Shuttle Conveyor discharge/transfer to Truck Load-out Stockpile	PF 1.017.1	7.10	6.00	0.001084	0.000380	75%
14	Shuttle Conveyor discharge/transfer to Tertiary Crushing Stockpile	PF 1.023.1	7.10	4.00	0.001913	0.000670	75%
	Shuttle Conveyor discharge/transfer to Truck load-out Stockpile	PF 1.025	7.10	6.00	0.001084	0.000380	99%
24	Apron Feeder discharge/transfer to Truck Conveyor	PF 1.026	7.10	6.00	0.001084	0.000380	99%
	Apron Feeder discharge/transfer to Leach Pad Haul Truck	PF 1.027	7.10	6.00	0.001084	0.000380	99%
35	Radial Slacker discharge/transfer to Stockpile	PF 1.034	7.10	6.00	0.001084	0.000380	75%
61	Mixer	PF 1.035	7.10	7.00	0.000874	0.000306	0%
85	ROM Discharge to vibrating grizzly	PF 1.043	7.10	3.99	0.001920	0.000672	0%
87	Ore Stockpile Drops-to under-size stockpile	PF 1.049	7.10	3.99	0.001920	0.000672	0%
	Ore Stockpile Drops-to oversize stockpile	PF 1.050	7.10	3.99	0.001920	0.000672	0%

				Assume lime and cement are similar in dusting properties
				0.0089 Controlled EF
				0.0049 Controlled EF
				0.0568 Controlled EF
				0.0160 Controlled EF
				0.0051 Uncontrolled EF
				0.0024 Uncontrolled EF
				0.0069 Uncontrolled EF
				0.0033 Uncontrolled EF
				0.5440 Uncontrolled EF
				0.1340 Uncontrolled EF
				0.9950 Uncontrolled EF
				0.2780 Baghouse
				87.5% Enclosure, water spray
				50% Enclosure, water spray
				None

Reference	System #	PM/PM10 (lb/MMscf)	SO2 (lb/MMscf)	NOx (lb/MMscf)	CO (lb/MMscf)	VOC (lb/MMscf)
D1	45	7.6	9.5696	100	84	5.5
D2	58	7.6	9.5696	100	73.37	5.5
D3	59	7.6	9.5696	100	73.37	5.5
D11	72	7.6	9.5696	100	84	5.5
D12	73	7.6	9.5696	100	84	5.5

F See permit minor revision application dated February 23, 2004 for emission calculations.

PM & PM10 Emissions - (lb/hr)  
PM & PM10 Emissions - (ton/yr)

G Based on Title V Permit Limit (Permit #AP1041-0763)

Reference	System #	Max Loading Rate PM & PM10 (lb/MMscf)	PM (lb/hr)	PM10 (lb/hr)	PM (ton/yr)	PM10 (ton/yr)	Maximum Emission Rate SO2 (lb/hr)	SO2 (ton/yr)	Maximum Emission Rate NOx (lb/hr)	NOx (ton/yr)	CO (lb/hr)	CO (ton/yr)	VOC (lb/hr)	Max VOC (ton/yr)	Flow Rate (dscfm)
G1	03	0.05	2.67	2.31	11.69	11.69	27.4	—	31.93	—	—	—	—	—	14280
G4	42	—	281.28	23.31	—	—	12.91	—	18.11	—	4.89	—	3.28	—	124782
G5	43	—	281.29	5.54	—	—	—	—	39.53	—	—	—	—	—	129331
G6	44	—	70.32	3.70	—	—	—	—	—	—	—	—	—	—	19800
G7	15	0.05	0.06	0.06	0.25	0.25	—	—	—	—	—	—	—	—	1505
G8	16	0.05	0.06	0.06	0.25	0.25	—	—	—	—	—	—	—	—	1505
G9	17	0.05	0.11	0.11	0.44	0.44	—	—	—	—	—	—	—	—	2614
G10	18	0.05	0.32	0.92	3.63	3.63	—	—	—	—	—	—	—	—	43200
G11	19	0.05	0.10	0.10	0.40	0.40	—	—	—	—	—	—	—	—	3981
G12	19a	—	7.36	2.58	14.35	5.02	—	—	—	—	—	—	—	—	—
G13	20	0.05	0.37	0.87	3.41	3.41	—	—	—	—	—	—	—	—	33669
G14	21	0.05	0.31	0.31	1.24	1.24	—	—	—	—	—	—	—	—	14000
G15	34	0.05	1.22	5.34	5.34	5.34	—	—	—	—	—	—	—	—	28000
G16	36	0.05	0.94	0.94	4.12	4.12	—	—	—	—	—	—	—	—	19665
G18	38	0.05	0.38	0.38	1.66	1.66	—	—	—	—	—	—	—	—	7708
G19	39	0.05	0.88	0.88	3.87	3.87	—	—	—	—	—	—	—	—	17916
G20	40	—	17.87	17.87	78.28	78.28	—	—	—	—	—	—	—	—	203216
G21	41	—	0.29	0.29	1.29	1.29	—	—	—	—	—	—	—	—	5972
G22	46	—	0.75	0.75	3.27	3.27	—	—	—	—	—	—	—	—	—
G23	47	—	0.99	0.99	4.55	4.55	—	—	—	—	—	—	—	—	10000
G24	51	—	0.99	0.99	4.55	4.55	—	—	—	—	—	—	—	—	10000
G25	72	—	0.52	0.52	2.08	2.08	—	—	—	—	—	—	—	—	1800
G26	73	—	0.52	0.52	2.08	2.08	—	—	—	—	—	—	—	—	1800
G31	77	—	0.39	0.39	1.69	1.69	—	—	—	—	—	—	—	—	7500
G32	78	—	1.22	1.22	1.34	1.34	—	—	—	—	—	—	—	—	9500
G33	79	—	0.84	0.84	3.66	3.66	—	—	—	—	—	—	—	—	13000
G34	80	—	0.84	0.84	3.66	3.66	—	—	—	—	—	—	—	—	13000
G36	84	—	0.07	0.07	0.28	0.28	—	—	—	—	—	—	—	—	—
G37	86	0.05	0.776	0.776	3.39	3.39	—	—	—	—	—	—	—	—	—
G38	88	0.05	0.65	0.65	2.86	2.86	—	—	—	—	—	—	—	—	10000
G39	41A	0.05	0.88	0.88	3.87	3.87	—	—	—	—	—	—	—	—	221132
G40	Umbrella	—	—	—	129.54	129.54	—	—	—	—	214.8	—	97.1	—	35.39

H Based on Tanks 2 calculation submitted with original Title V Permit Application

Reference	System #	Maximum Emission Rate SO2 (lb/hr)	Maximum Emission Rate VOC (lb/hr)
H1	82	0.126	0.5519
H2	83	0.00445	0.0197

See Table

| Emissions based on:  
2800 dsr/min  
0.05 g/dscf

81

NOTES:

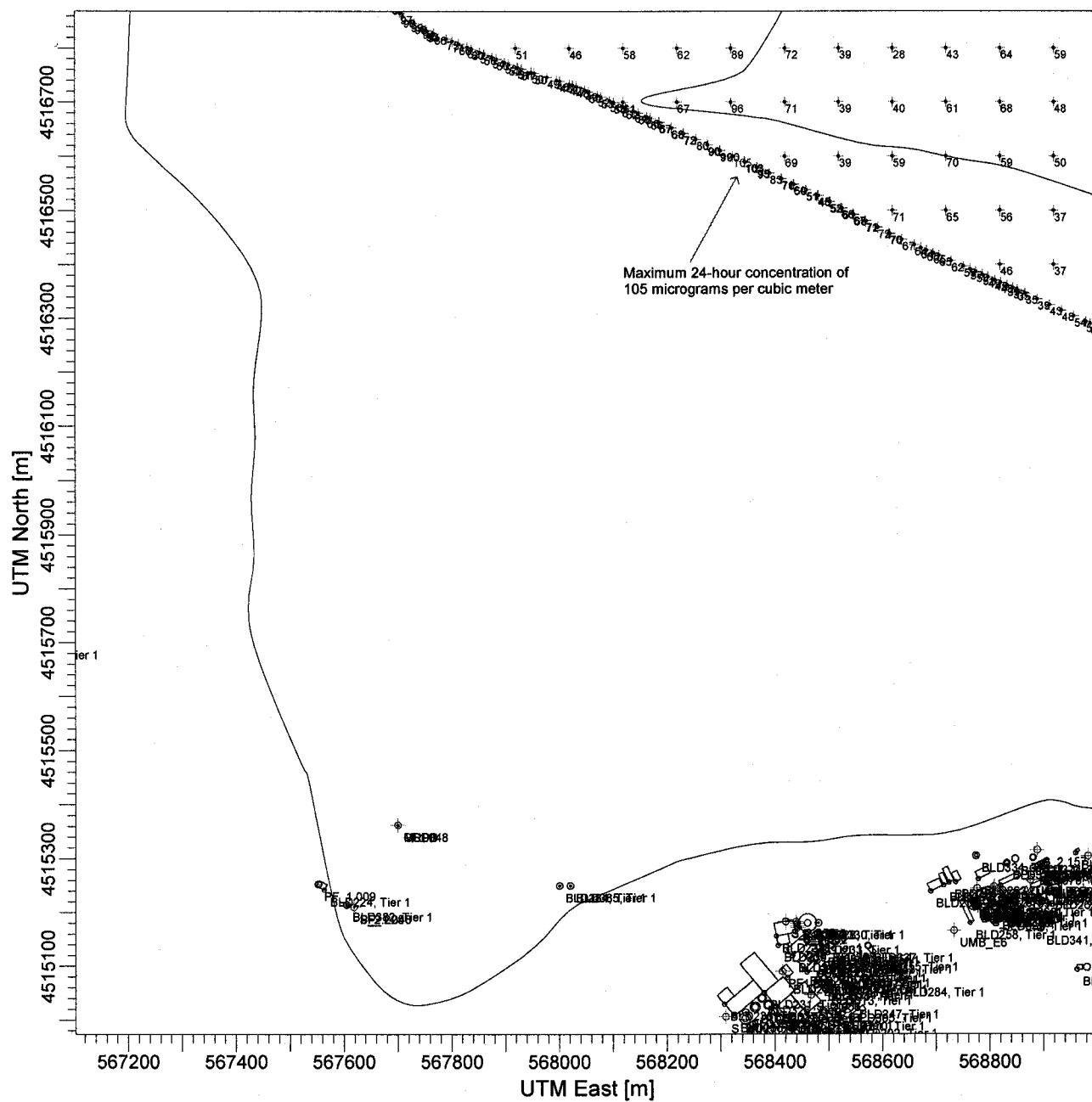
- 1) Control efficiencies that are not from NDEP/BAPC, Emission Control Technology - Control Efficiency Ratings, have the manufacturer's guarantee on file at BAPC
- 2) D - SO<sub>2</sub> emission factor calculated by NDEP
- 3) D - CO emission factors for Systems 58 & 59 are based on permitted lb/hr limits requested by Newmont on 1/22/93

**ATTACHMENT 2**

**Printed AERMOD Output**

**PROJECT TITLE:**

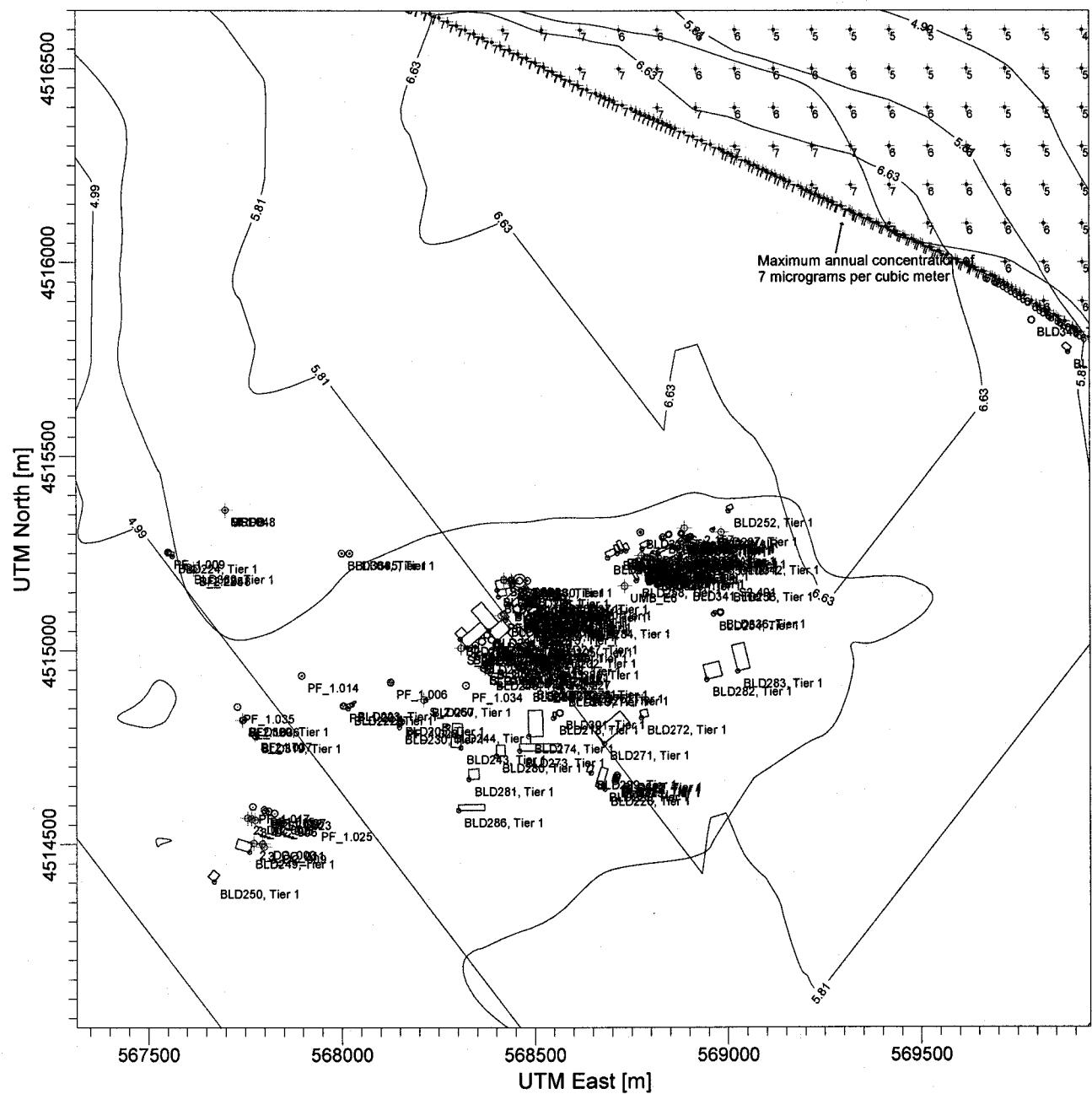
## New Chukar Underground Mine Shotcrete Plant 24-Hour PM10 Concentrations



COMMENTS:  Maximum concentration of 7 micrograms per cubic meter occurs at 569,294.10 meters East, 4,516,145.60 meters North	SOURCES:  <b>79</b>	COMPANY NAME:  <b>Newmont Mining Corporation</b>
RECEPTORS:	MODELER:	
<b>5951</b>	<b>Gay McCleary</b>	
OUTPUT TYPE:	SCALE:  <b>Concentration</b>	1:11,917  0  0.4 km
MAX:	DATE:	PROJECT NO.:  <b>12AP0239</b>
<b>104.5593 MICROGRAMS/M<sup>3</sup></b>	<b>2/13/2012</b>	

PROJECT TITLE:

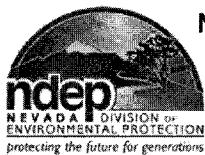
**New Chukar Underground Mine Shotcrete Plant  
Annual PM10 Concentrations**



COMMENTS:  Maximum concentration of 7 micrograms per cubic meter occurs at 569,294.10 meters East, 4,516,145.60 meters North	SOURCES:  79	COMPANY NAME:  <b>Newmont Mining Corporation</b>
RECEPTORS:  5951	MODELER:  <b>Gay McCleary</b>	
OUTPUT TYPE:  <b>Concentration</b>	SCALE:  0 0.5 km	1:16,494
MAX:  <b>7.4503 MICROGRAMS/M**</b>	DATE:  <b>2/13/2012</b>	PROJECT NO.:  <b>12AP0239</b>

**ATTACHMENT 3**

**Operating Permit Revised Pages**



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0002**

**Permit No. AP1041-0793**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

**Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee  
METAL REMOVAL PLANT**

**CG. System 85 – Underground Ore Receiving System (Added on December 6, 2007)**

PF 1.048 Underground Ore Receiving System

**CH. System 86 – Metal Removing System (Added on December 6, 2007)**

- S 2.220 Vibratory grizzly discharge to metal removal conveyor #1
- S 2.220.1 Vibratory grizzly discharge to inclined belt feeder
- S 2.221 Metal removal conveyor #1 discharge to metal removal conveyor #2
- S 2.222 Metal removal conveyor #2 discharge to transfer conveyor #3
- S 2.223 Transfer conveyor #3 discharge to radial stacker

**CI. System 87 – Ore Stockpile Drops (Added on December 6, 2007)**

- PF 1.049 Radial stacker discharge to undersize stockpile
- PF 1.050 Inclined belt feeder discharge to oversize stockpile

**PHOENIX SAMPLE PREP LAB**

**CJ. System 88 – Phoenix Prep Room Laboratory Crusher System (Added August 24, 2009)**

- S 2.226 Primary Crusher (858-CR-91)
- S 2.227 Primary Crusher (858-CR-92)
- S 2.228 Secondary Crusher (858-CR-93)
- S 2.229 Secondary Crusher (858-CR-94)
- S 2.230 Secondary Crusher (858-CR-95)
- S 2.231 Secondary Crusher (858-CR-96)

**CHUKAR UNDERGROUND SHOTCRETE PLANT**

**CK. System 89 – Shotcrete Lime/Cement/Fly Ash Silo**

- S 2.232 Lime/cement/fly ash silo, loading
- PF 1.053 Lime/cement/fly ash silo and discharge to hopper C-1

**CL. System 90 – Aggregate Loading**

- PF 1.054 Coarse/fine aggregate loading to hopper C-3

**CM. System 91 – Aggregate Hopper**

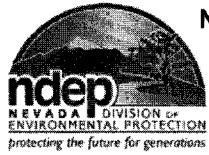
- PF 1.055 Hopper C-3 and discharge to mixing hopper C-2 via totally enclosed feed auger

**CN. System 92 – Lime/Cement/Fly Ash Hopper**

- PF 1.056 Lime/cement/fly ash hopper C-1 and discharge to mixing hopper C-2 via totally enclosed feed auger

**CO. System 93 – Mixing Hopper**

- PF 1.057 Mixing hopper C-2 and discharge to truck via totally enclosed truck mixing auger



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection  
**BUREAU OF AIR POLLUTION CONTROL**  
**Facility ID No. A0002**      **Permit No. AP1041-0793**  
**CLASS I AIR QUALITY OPERATING PERMIT**  
**SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)**

- D. Emission Unit # 2.014 location North 4515.586 km, East 566.392 km, UTM (Zone 11)

**D. System 04 – Chukar Underground Lime/Cement/Soda Ash Silo - Loading**

S	2.014	Chukar Underground Lime/Cement/Soda Ash Silo - Loading (500-DC-014)
---	-------	---

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Equipment

Emissions from S2.014 shall be ducted to a control system consisting of a Baghouse (500-DC-014) with 100% capture and a maximum volume flow rate of 1,300 dry standard cubic feet per minute (DSCFM). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Emission Limits

- a. On and after the date of startup of S2.014, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (500-DC-014), the following pollutants in excess of the following specified limits:

- i. NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.29 pound per hour, nor more than 1.29 tons per year, based on a 12-month rolling period. This limit is less than the 46.29 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by D.3.a. of this section.
- ii. NAC 445B.305 Part 70 Program - The discharge of PM (particulate matter) to the atmosphere will not exceed 0.53 pound per hour, nor more than 2.34 tons per year, based on a 12-month rolling period. This limit is less than the 46.29 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by D.3.a. of this section.
- iii. NAC 445B.22017 (Federally Enforceable SIP Requirement) – The opacity from the exhaust stack of Baghouse (500-DC-014) will not equal or exceed 20%.

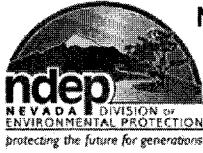
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

- a. The maximum allowable loading rate for S2.014 will not exceed 60.0 tons of lime/cement/soda ash per any one-hour period.

b. Hours

S2.014 may operate a total of 8760 hours per year.



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0002**

**Permit No. AP1041-0793**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

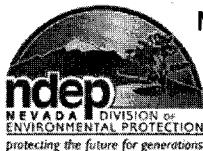
Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)**

D1. Emission Unit # 2.224 location North 4514.68 km, East 565.82 km, UTM (Zone 11)

**D1. System 04A – Chukar Underground Lime/Cement/Soda Ash Silo – Loading – Removed April x, 2012**

S	2.224	Chukar Underground Lime/Cement/Soda Ash Silo - Loading (500-DC-044)
---	-------	---

**BUREAU OF AIR POLLUTION CONTROL****Facility ID No. A0002****Permit No. AP1041-0793****CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)****CK. Emission Units S2.232 and PF.053 location North 4515.588 km, East 566.392 km, UTM (Zone 11)****System 89 – Shotcrete Lime/Cement/Fly Ash Silo**

S	2.232	Lime/cement/fly ash silo, loading
PF	1.053	Lime/cement/fly ash silo and discharge to hopper C-1

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Equipment

Emissions from S2.232 shall be ducted to a control system consisting of a baghouse (500-DC-044) with 100% capture and a maximum volume flow rate of 1,300 dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

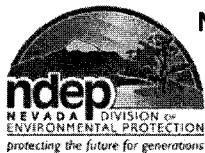
Emissions from PF1.053 shall be controlled by enclosure.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits

- a. On and after the date of startup of S2.232, the permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of Baghouse (500-DC-044), the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.29 pound per hour, nor more than 0.09 ton per year, based on a 12-month rolling period. This limit is less than the 46.29 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by CK.3.a of this section.
  - ii. NAC 445B.305 Part 70 Program - The discharge of PM to the atmosphere will not exceed 0.53 pound per hour, nor more than 0.16 ton per year, based on a 12-month rolling period.
  - iii. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) – The opacity from the exhaust stack of the baghouse (500-DC-044) will not equal or exceed 20%.
- b. On and after the date of startup of PF1.053, the permittee will not discharge or cause the discharge into the atmosphere from PF1.053 the following pollutants in excess of the following specified limits:
  - i. NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.012 pound per hour, nor more than 0.021 ton per year, based on a 12-month rolling period. This limit is less than the 19.18 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by CK.3.b of this section.
  - ii. NAC 445B.305 Part 70 Program - The discharge of PM to the atmosphere will not exceed 0.026 pound per hour, nor more than 0.045 ton per year, based on a 12-month rolling period.
  - iii. NAC 445B.22017 (*Federally Enforceable SIP Requirement*) – The opacity from PF1.053 will not equal or exceed 20%.

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters

- a. The maximum allowable loading rate for S2.232 will not exceed 60.0 tons of lime/cement/fly ash per any one-hour period, nor more than 35,100 tons per 12-month rolling period.
- b. The maximum allowable discharge rate for PF1.053 will not exceed 10 tons of lime/cement/fly ash per any one-hour period, nor more than 35,100 tons per 12-month rolling period.
- c. Hours
  - i. S2.232 may operate a total of 8760 hours per year.
  - ii. PF1.053 may operate a total of 8760 hours per year.



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0002**

**Permit No. AP1041-0793**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)**

**CK. Emission Units S2.232 and PF1.053 (continued)**

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*

a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the loading rate of lime/cement/fly ash in tons for S2.232 each day loading occurs.
- ii. Monitor and record the discharge rate of lime/cement/fly ash in tons for PF1.053 each day discharge occurs.
- iii. Monitor and record the hours of operation for S2.232 each day loading occurs.
- iv. Monitor and record the hours of operation for PF1.053 each day discharge occurs.
- v. Monitor and record the loading rate of lime/cement/fly ash in tons for S2.232 on a cumulative monthly basis, for each 12-month rolling period.
- vi. Monitor and record the discharge rate of lime/cement/fly ash in tons for PF1.053 on a cumulative monthly basis, for each 12-month rolling period.
- vii. Monitor and record that the maintenance and operation of the baghouse (500-DC-044) is in accordance with the manufacturer's and/or the permittee's operation and maintenance guidelines, on a monthly basis. Monthly records must show that observations were made, and records of any corrective actions taken.
- viii. Conduct and record an annual check of all bags contained in the baghouse (500-DC-044).
- ix. Conduct and record a weekly visible emission survey of the baghouse (500-DC-044) during silo loading and indicate whether any visible emissions were observed. If no visible emissions are observed during the survey of the baghouse (500-DC-044), then no further observations are required. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- x. Conduct and record a weekly visible emission survey of PF1.053 during silo discharge and indicate whether any visible emissions were observed. If no visible emissions are observed during the survey of PF1.053 then no further observations are required. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- xi. The required monitoring established in (i) through (x) above will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that S2.232 and PF1.053 are operating:
  - (a) The calendar date of any required monitoring.
  - (b) The total daily loading rate of lime/cement/fly ash, in tons, for the corresponding date.
  - (c) The total daily discharge rate of lime/cement/fly ash, in tons, for the corresponding date.
  - (d) The total daily hours of operation of S2.232 for the corresponding date.

Added April x, 2012



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0002**

**Permit No. AP1041-0793**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

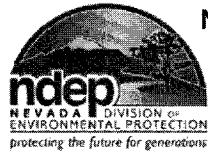
**Section VI. Specific Operating Conditions (continued)**

**CK. Emission Units S2.232 and PF1.053 (continued)**

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program (continued)*
  - a. Monitoring, Record keeping and Compliance (continued)
    - (e) The total daily hours of operation of **PF1.053** for the corresponding date.
    - (f) The corresponding average hourly loading rate of lime/cement/soda ash, in tons per hour. The average hourly loading rate will be determined from the daily loading rate and the total daily hours of operation recorded in (b) and (d) above.
    - (g) The corresponding average hourly discharge of lime/cement/fly ash, in tons per hour. The average hourly discharge rate will be determined from the daily loading rate and the total daily hours of operation recorded in (c) and (e) above.
    - (h) The cumulative monthly loading rate of lime/cement/fly ash for each 12-month rolling period.
    - (i) The cumulative monthly discharge rate of lime/cement/fly ash for each 12-month rolling period.
    - (j) Results and verification of the weekly visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
    - (k) Records and results of the annual check of bags contained in the baghouse (500-DC-044).
5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program Shielded Requirements*

No Shielded Requirements

Added April x, 2012



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection  
**BUREAU OF AIR POLLUTION CONTROL**  
**Facility ID No. A0002**      **Permit No. AP1041-0793**  
**CLASS I AIR QUALITY OPERATING PERMIT**  
**SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)**

CL. **Emission Unit PF1.054**      location North 4515.588 km, East 566.392 km, UTM (Zone 11)

**System 90 – Aggregate Loading**

PF	1.054	Coarse/fine aggregate loading to hopper C-3
----	-------	---

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from PF1.054 shall be controlled by best operating practices.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Emission Limits

- a. On and after the date of startup of PF1.054, the permittee will not discharge or cause the discharge into the atmosphere from PF1.054, the following pollutants in excess of the following specified limits:

- i. NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.089 pound per hour, nor more than 0.157 ton per year, based on a 12-month rolling period. This limit is less than the 37.31 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by CL.3.a of this section.
- ii. NAC 445B.305 Part 70 Program - The discharge of PM to the atmosphere will not exceed 0.186 pound per hour, nor more than 0.327 ton per year, based on a 12-month rolling period.
- iii. NAC 445B.22017 (Federally Enforceable SIP Requirement) – The opacity from PF1.054 will not equal or exceed 20%.

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

- a. The maximum allowable throughput rate for PF1.054 will not exceed 27 tons of aggregate per any one-hour period, nor more than 94,900 tons per 12-month rolling period.

b. Hours

PF1.054 may operate a total of 8760 hours per year.

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program

a. Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- i. Monitor and record the throughput rate of aggregate for PF1.054 on a daily basis.
- ii. Monitor and record the hours of operation for PF1.054 on a daily basis.
- iii. Monitor and record the throughput rate of aggregate for PF1.054 on a cumulative monthly basis, for each 12-month rolling period.
- iv. Conduct and record a weekly visible emission survey of PF1.054 during operation and indicate whether any visible emissions were observed. If no visible emissions are observed during the survey of PF1.054 then no further observations are required. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

Added April x, 2012



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0002**

**Permit No. AP1041-0793**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)**

**CL. Emission Unit PF1.054 (continued)**

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (continued)
  - a. Monitoring, Record keeping and Compliance (continued)
    - v. The required monitoring established in (i) through (iv) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that PF1.054 is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
      - (c) The total daily hours of operation for the corresponding date.
      - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
      - (e) The cumulative monthly throughput rate of aggregate for each 12-month rolling period.
      - (f) Results and verification of the weekly visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.

5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*  
Shielded Requirements

No Shielded Requirements

Added April x, 2012

**BUREAU OF AIR POLLUTION CONTROL****Facility ID No. A0002****Permit No. AP1041-0793****CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)**

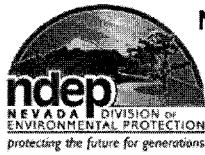
CM. Emission Unit PF1.055 location North 4515.588 km, East 566.392 km, UTM (Zone 11)

**System 91 – Aggregate Hopper**

PF 1.055 Hopper C-3 and discharge to mixing hopper C-2 via totally enclosed feed auger

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Control Equipment  
Emissions from **PF1.055** shall be controlled by enclosure and water sprays on **PF1.055**.
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits
  - a. On and after the date of startup of **PF1.055**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.055**, the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.011 pound per hour, nor more than 0.02 ton per year, based on a 12-month rolling period. This limit is less than the 37.31 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by CM.3.a of this section.
    - ii. NAC 445B.305 Part 70 Program - The discharge of PM to the atmosphere will not exceed 0.023 pound per hour, nor more than 0.04 ton per year, based on a 12-month rolling period.
    - iii. NAC 445B.22017 (Federally Enforceable SIP Requirement) – The opacity from **PF1.055** will not equal or exceed 20%.
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. The maximum allowable throughput rate for **PF1.055** will not exceed 27 tons of aggregate per any one-hour period, nor more than 94,900 tons per 12-month rolling period.
  - b. Hours  
**PF1.055** may operate a total of 8760 hours per year.
4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance  
The Permittee, upon issuance of this operating permit will:
    - i. Monitor and record the throughput rate of aggregate for **PF1.055** on a daily basis.
    - ii. Monitor and record the hours of operation for **PF1.055** on a daily basis.
    - iii. Monitor and record the throughput rate of aggregate for **PF1.055** on a cumulative monthly basis for each 12-month rolling period.
    - iv. Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all spray heads are operating. Record any sprays that were repaired, replaced or modified.
    - v. Conduct and record a weekly visible emission survey of **PF1.055** during operation and indicate whether any visible emissions were observed. If no visible emissions are observed during the survey of **PF1.055** then no further observations are required. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

Added April x, 2012



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection  
**BUREAU OF AIR POLLUTION CONTROL**  
**Facility ID No. A0002**      **Permit No. AP1041-0793**  
**CLASS I AIR QUALITY OPERATING PERMIT**  
**SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

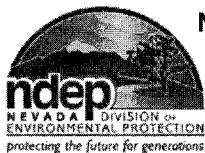
**Section VI. Specific Operating Conditions (continued)**

**CM. Emission Unit PF1.055 (continued)**

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (continued)
  - a. Monitoring, Record keeping and Compliance (continued)
    - vi. The required monitoring established in (i) through (v) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that PF1.055 is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
      - (c) The total daily hours of operation for the corresponding date.
      - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
      - (e) The cumulative monthly throughput rate of aggregate for each 12-month rolling period.
      - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for the control of emissions.
      - (f) Results and verification of the weekly visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*  
Shielded Requirements

No Shielded Requirements

Added April x, 2012

**BUREAU OF AIR POLLUTION CONTROL****Facility ID No. A0002****Permit No. AP1041-0793****CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS****Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee****Section VI. Specific Operating Conditions (continued)****CN. Emission Unit PF1.056**

location North 4515.588 km, East 566.392 km, UTM (Zone 11)

**System 92 – Lime/Cement/Soda Ash Hopper**

PF	1.056	Lime/cement/soda ash hopper C-1 and discharge to mixing hopper C-2 via totally enclosed feed auger
----	-------	--

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Air Pollution Control Equipment

Emissions from **PF1.056** shall be controlled by enclosure and water sprays on **PF1.056**.

2. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Emission Limits

- a. On and after the date of startup of **PF1.056**, the permittee will not discharge or cause the discharge into the atmosphere from **PF1.056**, the following pollutants in excess of the following specified limits:

- NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 0.17 pound per hour, nor more than 0.29 ton per year, based on a 12-month rolling period. This limit is less than the 19.18 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by CN.3.a of this section.
- NAC 445B.305 Part 70 Program - The discharge of PM to the atmosphere will not exceed 0.68 pound per hour, nor more than 1.19 tons per year, based on a 12-month rolling period.
- NAC 445B.22017 (Federally Enforceable SIP Requirement) – The opacity from **PF1.056** will not equal or exceed 20%.

3. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Operating Parameters

- a. The maximum allowable throughput rate for **PF1.056** will not exceed 10 tons of aggregate per any one-hour period, nor more than 35,100 tons per 12-month rolling period.

Hours

**PF1.056** may operate a total of 8760 hours per year.

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Monitoring, Record keeping and Compliance

The Permittee, upon issuance of this operating permit will:

- Monitor and record the throughput rate of aggregate for **PF1.056** on a daily basis.
- Monitor and record the hours of operation for **PF1.056** on a daily basis.
- Monitor and record the throughput rate of aggregate for **PF1.056** on a cumulative monthly basis for each 12-month rolling period.
- Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all spray heads are operating. Record any sprays that were repaired, replaced or modified.
- Conduct and record a weekly visible emission survey of **PF1.056** during operation and indicate whether any visible emissions were observed. If no visible emissions are observed during the survey of **PF1.056** then no further observations are required. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

Added April x, 2012



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0002**

**Permit No. AP1041-0793**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

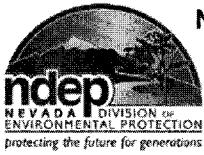
**Section VI. Specific Operating Conditions (continued)**

**CN. Emission Unit PF1.056 (continued)**

4. NAC 445B.3405 (NAC 445B.316) *Part 70 Program* (continued)
  - a. Monitoring, Record keeping and Compliance (continued)
    - vi. The required monitoring established in (i) through (v) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that PF1.056 is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
      - (c) The total daily hours of operation for the corresponding date.
      - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
      - (e) The cumulative monthly throughput rate of aggregate for each 12-month rolling period.
      - (f) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for the control of emissions.
      - (f) Results and verification of the weekly visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
5. NAC 445B.3405 (NAC 445B.316) *Part 70 Program*  
Shielded Requirements

No Shielded Requirements

Added April x, 2012



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection  
**BUREAU OF AIR POLLUTION CONTROL**  
**Facility ID No. A0002**      **Permit No. AP1041-0793**  
**CLASS I AIR QUALITY OPERATING PERMIT**  
**SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

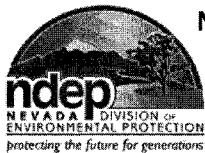
**Section VI. Specific Operating Conditions (continued)**

**CO. Emission Unit PF1.057**      location North 4515.588 km, East 566.392 km, UTM (Zone 11)

System 93 – Mixing Hopper		
PF	1.057	Mixing hopper C-2 and discharge to truck via totally enclosed truck mixing auger

1. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Air Pollution Control Equipment  
Emissions from PF1.057 shall be controlled by enclosure on PF1.057.
2. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Emission Limits
  - a. On and after the date of startup of PF1.057, the permittee will not discharge or cause the discharge into the atmosphere from PF1.057, the following pollutants in excess of the following specified limits:
    - i. NAC 445B.305 Part 70 Program - The discharge of PM<sub>10</sub> to the atmosphere will not exceed 1.39 pounds per hour, nor more than 2.44 tons per year, based on a 12-month rolling period. This limit is less than the 41.82 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by CO.3.a of this section.
    - ii. NAC 445B.305 Part 70 Program - The discharge of PM to the atmosphere will not exceed 4.98 pounds per hour, nor more than 8.73 tons per year, based on a 12-month rolling period.
    - iii. NAC 445B.22017 (Federally Enforceable SIP Requirement) – The opacity from PF1.057 will not equal or exceed 20%.
3. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Operating Parameters
  - a. The maximum allowable throughput rate for PF1.057 will not exceed 37 tons of aggregate and lime/cement/fly ash mixture per any one-hour period, nor more than 130,000 tons per 12-month rolling period.
  - b. Hours  
PF1.057 may operate a total of 8760 hours per year.
4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
  - a. Monitoring, Record keeping and Compliance  
The Permittee, upon issuance of this operating permit will:
    - i. Monitor and record the throughput rate of aggregate and lime/cement fly ash mixture for PF1.057 on a daily basis.
    - ii. Monitor and record the hours of operation for PF1.057 on a daily basis.
    - iii. Monitor and record the throughput of aggregate and lime/cement/fly ash mixture for PF1.057 on a cumulative monthly basis for each 12-month rolling period.
    - iv. Conduct a daily observation of the water sprays and verify that they are operating normally; record the time of the observation and indicate if the water sprays are operating normally. Monitor and record that all spray heads are operating. Record any sprays that were repaired, replaced or modified.
    - v. Conduct and record a weekly visible emission survey of PF1.057 during operation and indicate whether any visible emissions were observed. If no visible emissions are observed during the survey of PF1.057 then no further observations are required. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.

Added April x, 2012



Nevada Department of Conservation and Natural Resources • Division of Environmental Protection

**BUREAU OF AIR POLLUTION CONTROL**

**Facility ID No. A0002**

**Permit No. AP1041-0793**

**CLASS I AIR QUALITY OPERATING PERMIT  
SPECIFIC OPERATING REQUIREMENTS**

Issued to: Newmont Mining Corporation – Gold Quarry Operations Area, hereinafter called the permittee

**Section VI. Specific Operating Conditions (continued)**

**CO. Emission Unit PF1.057 (continued)**

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program (continued)
  - a. Monitoring, Record keeping and Compliance (continued)
    - vi. The required monitoring established in (i) through (v) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that PF1.057 is operating:
      - (a) The calendar date of any required monitoring.
      - (b) The total daily throughput rate of aggregate, in tons, for the corresponding date.
      - (c) The total daily hours of operation for the corresponding date.
      - (d) The corresponding average hourly throughput rate of aggregate, in tons per hour. The average hourly throughput rate will be determined from the daily throughput rate and the total daily hours of operation recorded in (b) and (c) above.
      - (e) Results and verification of the daily observations and the implementation and proper use of the water sprays, and any corrective actions taken in order to maintain implementation and proper use of the water sprays used for the control of emissions.
      - (f) Results and verification of the weekly visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.
5. NAC 445B.3405 (NAC 445B.316) Part 70 Program  
Shielded Requirements

No Shielded Requirements

Added April x, 2012

\*\*\*\*\*End of Specific Operating Conditions\*\*\*\*\*